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| 10/615,816 | 07/09/2003 | Graham Roger Jones | YAMAP0880US | 1433 |

43076 7590 06/04/2007
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| EXAMINER |
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WONG, ALLEN C

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| ART UNIT | PAPER NUMBER |
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2621

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06/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/615,816

Applicant(s)

JONES ET AL.

Examiner

Allen Wong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 4/6/07 have been fully read and considered but they are not persuasive.

Regarding lines 1-2 on page 3 of applicant's remarks about claims 1 and 24, applicant asserts that Woodgate does not teach or suggest the autostereoscopic display including a transreflective spatial light modulator. The examiner respectfully disagrees. In figures 1 and 2, Woodgate teaches that element 4 is the transreflective spatial light modulator for the autostereoscopic display. Thus, Woodgate discloses the autostereoscopic display including a transreflective spatial light modulator.

Regarding lines 3-4 on page 3 of applicant's remarks about claims 1 and 24, applicant contends that Woodgate does not teach or suggest the control of a transreflective spatial light modulator. The examiner respectfully disagrees. In figure 1, Woodgate discloses element 5 that comprises the details of the spatial light modulator 4 in that there is an arrangement of plural preventive transmission elements 5a and 5b for substantially preventing the transmission of light through the at least one first region of the modulator to an autostereoscopic viewing region of the display. In figure 1, Woodgate discloses that element 7 controls the transreflective spatial light modulator within the arrangement as shown in element 5. Thus, Woodgate discloses the control of a transreflective spatial light modulator.

Regarding lines 4-6 on page 3 of applicant's remarks, applicant states that Woodgate does not teach or suggest the advantages associated with a transreflective

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type autostereoscopic display in accordance with the present invention. The examiner respectfully disagrees. As discussed above, since Woodgate discloses the autostereoscopic display including a transreflective spatial light modulator, and the control of a transreflective spatial light modulator, the advantages associated with a transreflective type autostereoscopic display are disclosed in Woodgate.

Claims 1 and 24 are rejected, and the dependent claims are rejected for similar reasons by virtue of their dependency on claims 1 and 24.

Thus, the rejection is maintained.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Woodgate (5,917,562).

Regarding claim 1, Woodgate discloses an autostereoscopic display (see title) comprising:

a pixellated transreflective spatial light modulator comprising at least one first region, at least one second region, and a plurality of pixels (fig.1-2, element 4);

a backlight (fig.1, elements 1-2 and fig.2, element 9);

an arrangement for substantially preventing transmission of light through said at least one first region of said modulator to an autostereoscopic viewing region of said

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display (fig.1, element 5 shows the details of the spatial light modulator 4 where there is an arrangement of plural preventive transmission elements 5a and 5b); and

a controller for setting at least some of said pixels of said at least one first region to a first predetermined transmissivity and for setting at least some of said pixels of said at least one second region of said modulator to a second predetermined transmissivity less than said first transmissivity (fig.1, element 7).

Note claims 2-3 and 7-22 have similar corresponding elements.

Regarding claims 4-6, Woodgate discloses the parallax element (fig.2, element 11 is between elements 4 and 9).

Regarding claim 23, Woodgate discloses the modulator comprises a liquid crystal device (col.7, ln.42-44).

Regarding claim 24, Woodgate discloses an autostereoscopic display (see title) comprising:

a pixellated transfective spatial light modulator comprising at least one first region, at least one second region, and a plurality of pixels (fig.1-2, element 4);

a backlight (fig.1, elements 1-2 and fig.2, element 9); and

a controller for alternately selecting first and second phases of operation (fig.1, element 7), wherein, during said first phase, said controller sets at least some of said pixels of said at least one first region of said modulator to a first transmissivity and sets said backlight to supply light of a first intensity through at least some of said at least some pixels of said at least one first region, and wherein, during said second phase, said controller sets at least some of said pixels of said at least one second region of

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said modulator to a second transmissivity less than said first transmissivity and sets said backlight to supply light of a second intensity greater than said first intensity through at least some of said at least some pixels of said at least one second region (fig.1, element 7 is a controller, and fig.1, element 5 shows the details of the spatial light modulator 4 where there is an arrangement of plural preventive transmission elements 5a and 5b).

Note claims 25-28 and 31-46 have similar corresponding elements.

Regarding claims 29-30, Woodgate discloses the parallax element (fig.2, element 11 is between elements 4 and 9).

Regarding claim 47, Woodgate discloses the modulator comprises a liquid crystal device (col.7, ln.42-44).

Conclusion

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (571) 272-7341. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Allen Wong
Primary Examiner
Art Unit 2621

AW
5/29/07